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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,447	07/14/2006	Peter Jan Leonard Mario Quaedflieg	4662-177	2419
23117 7590 06/03/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER CHANDRAKUMAR, NIZAL S				
ART UNIT		PAPER NUMBER		
1625				
MAIL DATE		DELIVERY MODE		
06/03/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,447

Applicant(s)

QUAEDFLIEG ET AL.

Examiner

NIZAL S. CHANDRAKUMAR

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/03/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 04/03/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1625

DETAILED ACTION

Applicant's response filed 04/03/2008 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Previously presented rejection of claim 1 under 35 U.S.C. 112, first paragraph, is maintained because the specification, while being enabling for the claimed oxidation using TEMPO, does not reasonably provide enablement for the generically claimed TEMPO-derivatives of formula.

Applicant's arguments filed 04/03/2008 have been fully considered but they are not fully persuasive.

Thus, Applicant's arguments overcome the rejection with respect to variables Y and R5 and R6.

The rejection with respect to R1, R2, R3 and R4 is maintained for reasons of record. Applicant states that, examiner's did not provide 'acceptable evidence'. Further, Applicant states that examiner's argument (that the art of organic chemistry is unpredictable and as such the claimed efficiency with TEMPO will be obtained when TEMPO derivatives are used in place of TEMPO without providing substantial support for such a suggestion) is based mainly on assumptions. In addition, Applicant states that the unpredictability in the state of the art is stated without providing any evidence or supporting basis. Applicant further states that 'a considerable amount of experimentation is permissible, it is merely routine'.

Examiner's response,

a) with regards to the breadth of the claims: guidance in the form of citation for possible sources for the starting materials or literature citation for making the starting materials in lieu of disclosure with respect to the variables R1, R2, R3 and R4 examples is absent in the specification.

Art Unit: 1625

b) with regards to unpredictability and level of skill in the art: Applicant 'surprising' observation (see page 1 of the specification), is in itself indicative of the unpredictability in the art, in view of the disclosure of Ermolenko et al. (Synlett 2001, 10, 1565, see page 1565-. It is unclear if TEMPO itself failed or the methods of Ermolenko et al that contributed to the failure.

c) with regards to considerable (routine) experimentation: Applicant's claims are themselves are based on routine experimentation of Ermolenko et al. teachings of the use of TEMPO that applicant describes as teaching away from TEMPO (see below).

Based on the evidence in the specification, at the time the application was filed, enablement is present for the use of commercial TEMPO for the oxidation of Solketals.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The rejection of claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over Jenny Christian-Johannes et al. EP 0775684 A1 is maintained.

3. Applicant argues that the later work of Ermolenko et al. (cited above), teaches away from TEMPO is not capable of catalyzing the oxidation and thus one of ordinary skill in the art would not be motivated to have success when using TEMPO. Ermolenko et al. statement that TEMPO oxidation methods were unsuccessful is inconclusive because,

4. a) Ermolenko et al do not disclose what method or methods that did not work
5. b) Ermolenko et al. do not disclose what is the skill level of the experimenter

Art Unit: 1625

6. c) Ermolenko et al. do not disclose if all the methods/variations disclosed in the prior art teachings of Jenny Christian-Johannes et al. were tried.

TEMPO has been used extensively for the oxidation of alcohols over many years and is well known in the area of organic synthesis. Organic reactions need optimization of reaction conditions, it is routine. Thus, a reaction that does not work with a certain reaction condition (as with Ermolenko et al.) is indicative of requirement of optimization and identification of alternate reaction conditions. As stated by the applicant that 'a considerable amount of experimentation is permissible, it is merely routine'. One skilled in the art of organic chemistry, exploring efficient methods of oxidizing Solketals would be motivated to do just this, identify alternate reaction protocols taught by Jenny Christian-Johannes et al.

Conclusion

7. Applicant's arguments do not overcome the 35 U.S.C. 112, first paragraph rejection with respect to the variables R1, R2, R3 and R4.

8. Applicant's arguments are not persuasive to overcome the rejection under 35 U.S.C. 103(a).

9.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIZAL S. CHANDRAKUMAR whose telephone number is (571)272-6202. The examiner can normally be reached on 8.30 AM - 4.30 PM.

Art Unit: 1625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571 0272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nizal S. Chandrakumar

/D. Margaret Seaman/

Primary Examiner, Art Unit 1625